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Status of the State-endangered Mussel, Ligumia Nasuta, in the Upper Cuyahoga River

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Abstract

The primary objective of our research was to assess population size and range of *Ligumia nasuta*, the Eastern Pond mussel in the Cuyahoga River watershed. This region had not been examined since the early to mid 1990's, and no records exist for the East Branch Cuyahoga River. The headwaters of the Cuyahoga, predominantly the West Branch and East Branch Cuyahoga River, flow from the Geauga county highlands south into Portage County where mussel abundance was expected to rise as river size increased. Surveys at 29 sites were conducted using tactile techniques and visually where water levels were low. Mantle clippings of *Ligumia nasuta* were taken from all live specimens observed in preparation for genetic comparison to populations outside Ohio (results pending). We found only 17 live *Ligumia nasuta* of 372 mussels observed throughout the study. While whole shells and valves were also collected of *Ligumia nasuta*, it should be noted that all 35 valves were classified as long-dead. We conclude that the Eastern Pond mussel may be all but gone from the East Branch and West Branch Cuyahoga Rivers, but may persist in better numbers in Portage County. Further studies are required before the sustainability of this species can be fully assessed.